

**ATTACHMENT 23**  
**DATA REQUEST NO. 156**

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**CALIFORNIA COASTAL COMMISSION PROCEDURAL MEMO # 19**  
**INFORMATION NEEDED IN APPLICATIONS FOR SHORELINE**  
**PROTECTIVE DEVICES, JULY 29, 1992**

**RESPONSE TO DATA REQUESTS**  
**MAY 4, 2001**

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## CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000


SAN FRANCISCO, CA 94105-2219

TELEPHONE AND TDD (415) 904-5200



July 29, 1992 ✓

TO: Chuck Damm  
Tami Grove

FROM: TAG 

SUBJECT: PROCEDURAL MEMO #19 Final: Information Needed in Applications  
for Shoreline Protective Devices

Attached is a revised Procedural Memo identifying information needed for processing applications for shoreline protective devices. The memo has been developed in a form which can be easily duplicated for transmittal to permit applicants.

This memo is intended to assist applicants in preparing their applications for filing by identifying the basic information the Commission generally needs to adequately review applications for seawalls or other shoreline protective devices. While this outlines the information our experience has shown to be needed in the majority of cases, there may still be instances where the extent of information required varies, depending on the facts of the case.

cc: Peter Douglas  
Ralph Faust  
Jim Burns  
Steve Scholl  
Dave Loomis  
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Teresa Henry  
Deborah Lee  
Susan Hansch  
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## CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000

SAN FRANCISCO, CA 94105-2219

TELEPHONE AND TDD (415) 904-5200

PROCEDURAL MEMO

TO: Applicants for shoreline protective devices

FROM: Commission Staff

SUBJECT: Information needed for processing applications for shoreline protective devices

Introduction

The Coastal Commission has become increasingly concerned about the effects of seawalls and other shoreline protective devices on beaches. Because shoreline protective devices may cause increased erosion, public use and access along a beach can be adversely affected. Preventing or mitigating such loss of access and recreational opportunities is a responsibility of the Coastal Commission. The Commission is also concerned about such issues as: encroachment onto State Lands, preventing loss of sandy beach areas and allowing shoreline protective devices only if adverse impacts are eliminated or sufficiently mitigated.

To assist the Commission staff in filing and processing an application for a shoreline protective device, please be sure to provide at least the following information (pursuant to Section 13053.5(e) of the Commission's Regulations).

1. Written approval from the State Lands Commission

Applicants must provide information (such as a boundary determination) from the State Lands Commission indicating the location of the boundary between state lands and private property. Applicants should contact the State Lands Commission, Title Unit, 1807 13th Street, Sacramento, CA. 95814 (916) 322-7810 for State Lands Commission application procedures.

2. Project Plans

The project plans must be prepared or certified by a registered professional engineer with expertise in shoreline processes. Normally, this means a civil engineer or engineering geologist. On occasion, this can be a structural engineer or soils engineer if they have experience in coastal engineering.

The submitted plans must show the project footprint in relation to the applicant's property boundaries. The plans must indicate the location of the Mean High Tide Line, if it is available, and the date(s) it was established.

If the project extends onto an adjoining property, the adjoining owner should be invited to apply, or the applicant must show a legal right to use the adjoining property. In addition, the applicant shall demonstrate the ability to comply with any conditions of permit approval on the adjoining parcel.

A permanent benchmark should be established on the plans and on the site for future project maintenance and monitoring. This benchmark must be in relation to the standard of MSL (Mean Sea Level) or NGVD (National Geodetic Vertical Datum). Beach contours at 1 foot intervals shall be provided. Construction access shall be indicated with any special considerations noted.

### 3. Geotechnical Report

The report must be prepared by a registered professional engineer or engineering geologist as described in the section above. For small projects (for example, adding some 500 cu.yds. of rock to an existing rip-rap wall above the toe and the beach) a short letter report may be acceptable. This is also the case if a prior thorough investigation has been done and only an update is necessary. For most projects, however, a full report that is prepared according to the standards set by the Division of Mines and Geology, (see Note #44, Guidelines for Preparing Engineering Geology Reports; copy available upon request) must be conducted with some added features:

- \* Design wave height and design constraints
- \* Maximum expected wave height
- \* Frequency of overtopping
- \* Normal and maximum tidal ranges
- \* Erosion rate with/without protection device
- \* Effect of structure on adjoining property
- \* Potential/effect of scouring at base
- \* Design life of structure/maintenance provisions
- \* Alternatives to the project and to the chosen design. Project alternatives include, but are not limited to: no project, relocation of the threatened structure, beach nourishment, etc.
- \* Effect of structure upon public access to and along adjacent public tidelands

- \* Construction/staging area and technique of construction
- \* Maintenance provisions including methods and materials
- \* Monitoring report (annually, for the life of the project) which will evaluate the effectiveness of the structure, and the impacts of the structure on nearby beach areas (i.e., change in beach profile)

In addition, the engineer must certify that the structure is designed to withstand storms comparable to the winter storms of 1982-83, pursuant to Commission direction for such verification on all projects. \*

You should also be aware that due to the impacts of a protective device on beaches, the Commission may require some type monitoring of the effects of the seawall and a subsequent mitigation requirement if adverse impact is shown. One typical type of mitigation condition is a requirement for an offer to dedicate a lateral access easement for that portion of the beach seaward of the approved protective device. But there may be other mitigation requirements as well.

If you have any additional questions on the content of this memo, or the Commission procedures in general, please don't hesitate to contact your nearest Coastal Commission office.

## COASTAL ACT POLICY HANDBOOK

The following list summarizes the policies in Chapter 3 of the Coastal Act - the policies to which a local coastal program must conform. The policies have been organized into 14 groups, as follows:

- A. Shoreline Access
- B. Recreation and Visitor-Serving Facilities
- C. Housing
- D. Water and Marine Resources
- E. Dredging, Filling, and Shoreline Structures
- F. Commercial Fishing and Recreational Boating
- G. Environmentally Sensitive Habitat Areas
- H. Agriculture
- I. Hazards
- J. Forestry and Soils Resources
- K. Locating and Planning New Development
- L. Coastal Visual Resources and Special Communities
- M. Public Works
- N. Industrial and Energy Development

### A. SHORELINE ACCESS

#### COASTAL ACT POLICIES

30210. In carrying out the requirement of Section 2 of Article XV of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

30211. Development shall not interfere with the public's right of access to the sea where acquired through use, or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

30212. Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 2 of Article XV of the California Constitution.

### B.

#### RECREATION AND VISITOR-SERVING FACILITIES

##### COASTAL ACT POLICIES

30212.5. Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

30213. (Part) Lower cost visitor and recreational facilities... shall be protected, encouraged, and where feasible, provided. Developments providing public recreational opportunities are preferred.

30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

30222. The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

30250. (c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction of visitors.

C. HOUSING

CANCELLED

COASTAL ACT POLICIES

30213. Opportunities for persons of low and moderate income shall be encouraged, and where feasible, provided... New housing in the coastal zone shall be developed in conformity with the standards, policies, and goals of local housing elements adopted in accordance with the requirements of subdivision (c) of Section 65302 of the Government Code.

D. WATER AND MARINE RESOURCES

COASTAL ACT POLICIES

30230. Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will maintain the biological productivity of coastal waters and that will maintain health populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, maintaining adverse effects of waste water discharge and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water recirculation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

30236. Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

E. DIKING, DREDGING, FILLING, AND SHORELINE STRUCTURES

COASTAL ACT POLICIES

30233. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 10411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland; provided, however, that in no event shall the size of the wetland area used for such boating facility, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, be greater than 25 percent of the total wetland area to be restored.
- (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities.
- (5) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- (7) Restoration purposes.
- (8) Nature study, aquaculture, or similar resource-dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of South San Diego Bay, if otherwise in accordance with this division.

30235. Dredgeworks, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shorelines and supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

30411. (b) The Department of Fish and Game, in consultation with the Commission and the Department of Navigation and Ocean Development, may study degraded wetlands and identify those which can most feasibly be restored in conjunction with development of a boating facility. Any such study shall include consideration of all the following:

- (1) Whether the wetland is so severely degraded and its natural processes so substantially impaired that it is not capable of recovering and maintaining a high level of biological productivity without major restoration activities.
- (2) Whether a substantial portion of the degraded wetland, but in no event less than 75 percent, can be restored and maintained as a highly productive wetland in conjunction with a boating facility project.
- (3) Whether restoration of the wetland's natural values, including its biological productivity and wildlife habitat features, can most feasibly be achieved and maintained in conjunction with a boating facility or whether there are other feasible ways to achieve such values.

30607. Where any dike and fill development is permitted in wetlands in conformity with this division, mitigation measures shall include, at a minimum, either acquisition of equivalent areas of equal or greater biological productivity or opening up equivalent areas to tidal action; provided, however, that if no appropriate restoration site is available, an in-lieu fee sufficient to provide an area of equivalent productive value or surface areas shall be dedicated to an appropriate public agency, or such replacement site shall be purchased before the dike or fill development may proceed. Such mitigation measures shall not be required for temporary or short-term fill or diking provided that a bond or other evidence of financial responsibility is provided to assure that restoration will be accomplished in the shortest feasible time.

\*Applicable sections from other Chapters of the Coastal Act.

## F. COMMERCIAL FISHING AND RECREATIONAL BOATING

### COASTAL ACT POLICIES

30234. Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, installing non-water-dependent land uses that connect access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

30234. Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

30255. Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland.

## G. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

### COASTAL ACT POLICIES

30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

## H. AGRICULTURE

### COASTAL ACT POLICIES

30241. The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

- (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban uses.



(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(d) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(e) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b) of this section, and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

30242. All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

#### I. HAZARD AREAS

##### COASTAL ACT POLICIES

30253. New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs, or beaches.

#### J. FORESTRY AND SOIL RESOURCES

##### COASTAL ACT POLICIES

30243. The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.

#### K. LOCATING AND PLANNING NEW DEVELOPMENT

##### COASTAL ACT POLICIES

30244. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

30250. (a) New development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

30252. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing non-motorized circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential of public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of on-site recreational facilities to serve the new development.

30253. New development shall:

(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

(4) Minimize energy consumption and vehicle miles traveled.

#### L. COASTAL VISUAL RESOURCES AND SPECIAL COMMUNITIES

##### COASTAL ACT POLICIES

30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of

surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

30253. New development shall:

(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

#### PUBLIC WORKS

##### COASTAL ACT POLICIES

30254. New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

#### INDUSTRIAL DEVELOPMENT AND ENERGY FACILITIES.

##### COASTAL ACT POLICIES

30255. Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland.

30260. Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

30261. (a) Multicompany use of existing and new tanker facilities shall be encouraged to the maximum extent feasible and legally permissible, except where to do so would result in increased tanker operations and associated onshore development incompatible with the land use and environmental goals for the area. New tanker terminals outside of existing terminal areas shall be situated as to avoid risk to environmentally sensitive areas and shall use a monobuoy system, unless an alternative type of system can be shown to be environmentally preferable for a specific site. Tanker facilities shall be designed to (1) minimize the total volume of oil spilled, (2) minimize the risk of collision from movement of other vessels, (3) have ready access to the most effective feasible containment and recovery equipment for oil spills, and (4) have onshore dewatering facilities to remove any fouled ballast water from tankers where operationally or legally required.

(b) Only one liquefied natural gas terminal shall be permitted in the coastal zone until engineering and operational practices can eliminate any significant risk to life due to accident or until guaranteed supplies of liquefied natural gas and distribution system dependence on liquefied natural gas are substantial enough that an interruption of service from a single liquefied natural gas facility would cause substantial public harm.

Until the risks inherent in liquefied natural gas terminal operations can be sufficiently identified and overcome and such terminals are found to be consistent with the health and safety of nearby human populations, terminals shall be built only at sites remote from human population concentrations. Other unrelated development in the vicinity of a liquefied natural gas terminal site which is remote from human population concentrations shall be prohibited. At such time as liquefied natural gas marine terminal operations are found consistent with public safety, terminal sites only in developed or industrialized port areas may be approved.

30262. Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

- (a) The development is performed safely and consistent with the geologic conditions of the well site.
- (b) New or expanded facilities related to such development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number or producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.
- (c) Environmentally safe and feasible subsea completions are used when drilling platforms or islands would substantially degrade coastal visual qualities unless use of such structures will result in substantially less environmental risks.

(d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

(e) Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.

(f) With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil and Gas of the Department of Conservation determines to do so would adversely affect production of the reservoirs or do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjection will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.

Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

30263. (a) New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if (1) alternative locations are not feasible or are more environmentally damaging; (2) adverse environmental effects are mitigated to the maximum extent feasible; (3) it is found that not permitting such development would adversely affect the public welfare; (4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands, or within or contiguous to environmentally sensitive areas; and (5) the facility is sited so as to provide a sufficient buffer area to minimize adverse impacts on surrounding property.

(b) In addition to meeting all applicable air quality standards, new or expanded refineries or petrochemical facilities shall be permitted in areas designated as air quality maintenance areas by the State Air Resources Board and in areas where coastal resources would be adversely affected only if the negative impacts of the project upon air quality are offset by reductions in the case of an expansion of an existing site, total site emissions levels, and site levels for each emission type for which national or state ambient air quality standards have been established do not increase.

(c) New or expanded refineries or petrochemical facilities shall minimize the need for once-through cooling by air cooling to the maximum extent feasible and by using treated waste waters from implant processes where feasible.

30264. Notwithstanding any other provision of this division, except subdivisions (b) and (c) of Section 30413, new or expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area which have been determined to be acceptable pursuant to the provisions of Section 25516.

30272. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

30250. (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

30001.2.\* The legislature further finds and declares that, notwithstanding the fact electrical generating facilities, refineries, and coastal-dependent developments, including ports and commercial fishing facilities, offshore petroleum and gas development, and liquefied natural gas facilities, may have significant adverse effects on coastal resources or coastal access, it may be necessary to locate such developments in the coastal zone in order to ensure that inland as well as coastal resources are preserved and that orderly economic development proceeds within the state.

30413 (b)\* The commission shall, prior to January 1, 1978...designate those specific locations within the coastal zone where the location of a [thermal electric generating facility...would prevent the achievement of the objectives of this division] provided, however, that specific locations that are presently used for such facilities and reasonable expansion thereof shall not be so designated. Each such designation shall include...detailed findings....

(c) The commission shall every two years revise and update the designations specified in subdivision (b) of this section....

(d) Whenever the State Energy Resources Conservation and Development Commission exercises its siting authority...with respect to any thermal powerplant or transmission line to be located, in whole or in part, within the coastal zone, the commission shall participate in such proceedings...shall analyze each notice of intent and shall...forward a written report on the suitability of the proposed site and related facilities specified in such notice of intent....

\*Applicable sections from other Chapters of the Coastal Act.